

**Yakima County
WATER CONSERVANCY BOARD
Application for Change/Transfer
Record of Decision**

For Ecology Use Only

Received:

Date Stamp **DEPT OF ECOLOGY**
Received
JUL 11 2013

Reviewed by:

Date Reviewed: CENTRAL REGION OFFICE

Applicant: Sunnyside Dairy, LLC

Application Number: YAKI-12-04

This record of decision was made by a majority of the board at an open public meeting of the Yakima County Water Conservancy Board held on July 10, 2013.

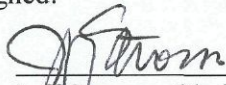
☒ **Approval:**

The Yakima County Water Conservancy Board hereby **grants** conditional approval for the water right transfer described and conditioned within the report of examination on JULY 10, 2013 and submits this record of decision and report of examination to the Department of Ecology for final review.

☐ **Denial:**

The Yakima County Water Conservancy Board hereby **denies** conditional approval for the water right transfer as described within the report of examination on _____ and submits this record of decision to the Department of Ecology for final review.

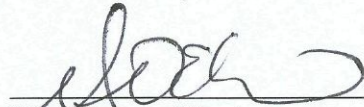
Signed:



Jeff Stevens, Chair
Yakima County Water Conservancy Board

Date: 7-10-13

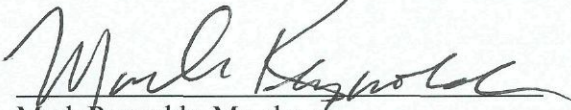
Approve ☐
Deny ☐
Abstain ☐
Recuse ☐



Dave Brown, Member
Yakima County Water Conservancy Board

Date: 7-10-13

Approve ☒
Deny ☐
Abstain ☐
Recuse ☐



Mark Reynolds, Member
Yakima County Water Conservancy Board

Date: 7-10-13

Approve ☒
Deny ☐
Abstain ☐
Recuse ☐

Dave England, Voting Alternate
Yakima County Water Conservancy Board

Date: _____

Approve ☐
Deny ☐
Abstain ☐
Recuse ☐

Hand-delivered

Mailed to the Department of Ecology Central Regional Office of Ecology, via certified mail, and other interested parties on July 11, 2013.



Yakima County
WATER CONSERVANCY BOARD
Application for Change/Transfer
OF A RIGHT TO THE BENEFICIAL USE OF THE PUBLIC WATERS OF
THE STATE OF WASHINGTON

Report of Examination



NOTE TO APPLICANT: Pursuant to WAC 173-153-130(8), the applicant is not permitted to proceed to act on the proposal until Ecology makes a final decision affirming, in whole or in part, the Board's recommendation. It is advised that the applicant not proceed until the appeal period of Ecology's decision is complete.

☐ Surface Water ☒ Ground Water

DATE APPLICATION RECEIVED December 13, 2012	WATER RIGHT DOCUMENT NUMBER (i.e., claim, permit, certificate, etc.) G4-30398P	WATER RIGHT PRIORITY DATE September 5, 1990	BOARD-ASSIGNED CHANGE APPLICATION NUMBER YAKI-12-04
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NAME Sunnyside Dairy, LLC			
ADDRESS (STREET) 4581 Maple Grove Rd	(CITY) Sunnyside	(STATE) WA	(ZIP CODE) 98944

Changes Proposed: ☐ Change purpose ☐ Add purpose ☐ Add irrigated acres ☐ Change point of diversion/withdrawal
☒ Add point(s) of diversion/withdrawal ☒ Change place of use ☐ Other (Temporary, Trust, Interties, etc.)

SEPA

The Board has reviewed the provisions of the State Environmental Policy Act of 1971, Chapter 43.21C RCW and the SEPA rules, chapter 197-11 WAC and has determined the application is: ☒ Exempt ☐ Not exempt

BACKGROUND AND DECISION SUMMARY

Existing Right (Tentative Determination)

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE 200	MAXIMUM ACRE-FT/YR 158	TYPE OF USE, PERIOD OF USE 157 ac-ft/yr for continuous dairy operation for 2000 animals; and 1 ac-ft/yr for continuous group domestic supply to a single home and dairy facilities.				
SOURCE Two (2) wells			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY
22100221401	W1/2	SW1/4	35	11 N	22 EWM	37	Yakima
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED							
The following parcel within the S½ of Section 35, T. 11 N., R. 22 E.W.M.: All that part of the SW¼ of Section 35, lying Southerly of the Southerly right-of-way line of the Roza Canal, EXCEPT the West 31 feet of that part in the NW¼SW¼, EXCEPT the West 30 feet of that part in the SW¼SW¼, AND EXCEPT the South 25 feet thereof for county road rights-of-way. AND All that part of the S½SE¼ of Section 35, lying South of the South right-of-way line of Roza Canal and west of a line described as: Beginning at the Southwest corner of the SW¼SE¼ of said Section 35; thence North 01°30' West along the West line of said SW¼SE¼ a distance of 21.32 feet; thence North 22°41' East to the Southerly right-of-way line of the Roza Canal. AND The following parcels within the NW¼ of Section 2, T. 10 N., R. 22 E.W.M.: Lot 2 of Short Plat recorded in Book 89 of Short Plats, page 106, under Auditor's File No. 2868751, records of Yakima County, Washington consisting of 42.38 acres and lying within the N½SW¼ of Section 2; AND The S½NW¼ of Section 2, EXCEPT the West 30 feet for county road, EXCEPT the South 25 feet for county road, AND EXCEPT those portions deeded to Yakima County, Washington for road right-of-way by instruments recorded April 24, 1987, under Auditor's Files No. 2796949 and No. 2796950.							
PARCEL NO. ptn 22100221401	¼	¼	SECTION 35, 2	TOWNSHIP N. 11 N, 10 N	RANGE 22 E		

Proposed Use

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE 200	MAXIMUM ACRE-FT/YR 158	TYPE OF USE, PERIOD OF USE 157 ac-ft/yr for continuous dairy operation; and 1 ac-ft/yr for continuous group domestic supply to a single home and dairy facilities.				
SOURCE Four (4) wells			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
22100221401	W1/2	SW1/4	35	11 N	22 EWM	37	Yakima
various	W1/2	SW1/4	02	10 N	22 EWM	37	Yakima
22100314401,402	SE	NE	03	10 N	22 EWM	37	Yakima
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED							
NW1/4 Section 2, T. 10 N., R. 22 E.W.M.							
<p>AND Within Section 35, T. 11 N., R. 22 E.W.M.:</p> <p>That portion of SW1/4 lying southerly of southerly Roza Canal right-of-way.</p> <p>AND All that part of the S½SE¼ of Section 35, lying South of the South right-of-way line of Roza Canal and west of a line described as: Beginning at the Southwest corner of the SW¼SE¼ of said Section 35; thence North 01°30' West along the West line of said SW¼SE¼ a distance of 21.32 feet; thence North 22°41' East to the Southerly right-of-way line of the Roza Canal.</p> <p>Except county road right of ways.</p> <p>Yakima County Parcel No. 22100221401.</p>							
PARCEL NO. See above.	¼	¼	SECTION See above.	TOWNSHIP N. See above.	RANGE, See above.		

Board's Decision on the Application

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE 200	MAXIMUM ACRE-FT/YR 158	TYPE OF USE, PERIOD OF USE 157 ac-ft/yr for continuous dairy operation; and 1 ac-ft/yr for continuous group domestic supply to a single home and dairy facilities.				
SOURCE Four (4) wells			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
22100221401	W1/2	SW1/4	35	11 N	22 EWM	37	Yakima
various	W1/2	SW1/4	02	10 N	22 EWM	37	Yakima
22100314401,402	SE	NE	03	10 N	22 EWM	37	Yakima
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED							
NW1/4 Section 2, T. 10 N., R. 22 E.W.M.							
<p>AND Within Section 35, T. 11 N., R. 22 E.W.M.:</p> <p>That portion of SW1/4 lying southerly of southerly Roza Canal right-of-way.</p> <p>AND All that part of the S½SE¼ of Section 35, lying South of the South right-of-way line of Roza Canal and west of a line described as: Beginning at the Southwest corner of the SW¼SE¼ of said Section 35; thence North 01°30' West along the West line of said SW¼SE¼ a distance of 21.32 feet; thence North 22°41' East to the Southerly right-of-way line of the Roza Canal.</p> <p>Except county road right of ways.</p> <p>Yakima County Parcel No. 22100221401.</p>							
PARCEL NO. See above.	¼	¼	SECTION See above.	TOWNSHIP N. See above.	RANGE, See above.		

DESCRIPTION OF PROPOSED WORKS

Added wells to be constructed within the Saddle Mountains Basalt Formation aquifer in order to develop permitted flow rate, together with pumps, mainline and equipment for water delivery.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:

Begun

COMPLETE PROJECT BY THIS DATE:

December 31, 2017

COMPLETE CHANGE AND PUT WATER TO FULL USE BY THIS DATE:

December 31, 2018

REPORT

BACKGROUND [See WAC 173-153-130(6)(a)]

On December 13, 2012 Sunnyside Dairy, LLC filed two applications for change to add points of withdrawal, change/amend the place of use and change/amend the purpose/manner of use under water right Permit Nos. G4-30371P and G4-30398P; Yakima County Water Conservancy Board (YCWCB or Board) numbers: YAKI-12-03 and YAKI-12-04, respectively.

The Department of Ecology (Ecology) assigned application Nos. CG4-30371P and CG4-30398P, respectively.

At the dairy site for both permits, an added well or wells are needed for increased pumping capacity. The same wells will serve both permits. The current wells are limited by sand entering the wells at higher pumping rates. The same two current wells serve both permits. The place of use change for both permits is to include contiguous land that is used for the dairy. For G4-30371P additional changes are requested to accommodate a water right lease to a winery that is eight miles easterly from the dairy. The change applications are being processed as permanent changes, however for YAKI-12-03 (G4-30371P) the permit holder's proof of appropriation for the change will inform Ecology whether the industrial (winery) site uses are to be included for final certificate issuance.

This report focuses on YAKI-12-04 relating to permit G4-30398P, but includes discussion of YAKI-12-03 where related.

Attributes of the water right as currently documented

Name on certificate, claim, permit: Sunnyside Dairy, LLC by assignment acknowledged February 14, 2013.

Water right document number: Superseding Permit No. G4-30398P issued February 13, 2002.

As modified by certificate of change number: n/a.

Priority date, first use: September 5, 1990.

Water quantities: Qi: 200 gallons per minute (gpm) Qa: 158 acre-feet/year (af/yr or ac-ft/yr).

Source: Two (2) wells.

Point of diversion/withdrawal: W1/2SW1/4 S.35, T11N, R22EWM; 1300 ft S and 200 ft E of W1/4 corner Sec. 35 and 2100 ft S and 700 ft E of W1/4 corner Sec. 35.

Purpose of use: 157 af/yr for continuous dairy operation for 2000 animals; and 1 af/yr for continuous group domestic supply to a single home and dairy facilities.

Period of use: Year round.

Place of use: The following parcel within the S $\frac{1}{2}$ of Section 35, T. 11 N., R. 22 E.W.M.: All that part of the SW $\frac{1}{4}$ of Section 35, lying Southerly of the Southerly right-of-way line of the Roza Canal, EXCEPT the West 31 feet of that part in the NW $\frac{1}{4}$ SW $\frac{1}{4}$, EXCEPT the West 30 feet of that part in the SW $\frac{1}{4}$ SW $\frac{1}{4}$, AND EXCEPT the South 25 feet thereof for county road rights-of-way. AND All that part of the S $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 35, lying South of the South right-of-way line of Roza Canal and west of a line described as: Beginning at the Southwest corner of the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of said Section 35; thence North 01°30' West along the West line of said SW $\frac{1}{4}$ SE $\frac{1}{4}$ a distance of 21.32 feet; thence North 22°41' East to the Southerly right-of-way line of the Roza Canal. AND The following parcels within the NW $\frac{1}{4}$ of Section 2, T. 10 N., R. 22 E.W.M.: Lot 2 of Short Plat recorded in Book 89 of Short Plats, page 106, under Auditor's File No. 2868751, records of Yakima County, Washington consisting of 42.38 acres and lying within the N $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 2; AND The S $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 2, EXCEPT the West 30 feet for county road, EXCEPT the South 25 feet for county road, AND EXCEPT those portions deeded to Yakima County, Washington for road right-of-way by instruments recorded April 24, 1987, under Auditor's Files No. 2796949 and No. 2796950.

Existing provisions:

Before beginning construction, the drilling contractor must consult with the department concerning a cuttings sampling program.

The casing shall be set or placed (not driven) twenty (20) feet into the first solid, unfractured, nonporous, nonvesicular basalt flow occurring at or below 400 feet, whichever is greater. The well annulus shall be pressure grouted utilizing cement grout as a sealing agent from the bottom of the casing to land surface and the annulus shall be at least four (4) inches greater in diameter than the permanent casing. The well shall be restricted to a depth corresponding to the top of the Priest Rapids Member, which should be encountered at a depth of approximately 800 feet. Alternative drilling/casing methods shall only be allowed with prior written authorization from Ecology's Well Construction Coordinator.

Both wells shall withdraw water from the same aquifer.

All other requirements specified by WAC 173-160 shall apply to this well.

After completion of construction, each well shall be video scanned (providing a visually clear and recognizable picture that is continuous from land surface to the terminus of the well) and the video tape reviewed by the Central Regional Office of the Washington State Department of Ecology prior to the installation of the production pump.

For the purpose of making water level measurements, installation and maintenance of an access port as described in Ground Water Bulletin No. 1 is required for each well. Installation and maintenance of an air line and gage is also required. The air line shall be constructed of 1/4 inch minimum diameter galvanized steel pipe, or comparable material if preapproved by the department. Distance from land surface to the bottom end of the air line shall be clearly posted at each well site, accurate at all times to 0.5 feet or less. The air line shall be equipped with a standard tire valve. The air line, access port, and all well equipment shall be installed and maintained to provide free access for accurate measurement of water levels.

An approved measuring device shall be installed and maintained for the sources authorized herein in accordance with the rule "Requirements for Measuring and Reporting Water Use", Chapter 173-173 WAC. Water use data shall be recorded weekly and shall be submitted annually to Ecology by January 31st of each calendar year.

The rules above describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Information on installation, operation and maintenance requirements are attached.

At a minimum, the following information shall be included with each submittal of water use data: Owner, Contact Name if Different, Mailing Address, Daytime Phone Number, WRIA, Certificate #, Source Name, Annual Quantity Used (including units), Maximum Rate of Withdrawal (including units).

Project construction and operation procedures shall ensure protection of wetlands, in accordance with Executive Order 90-04 Protection of Wetlands.

A proof inspection will be conducted prior to final certificate issuance. The certificate will reflect the extent of the project perfected within the limitations of the permit. Aspects will include as appropriate the source(s), system instantaneous capacity, beneficial use(s), annual quantity, number of stock, home services designed, place of use, and satisfaction of provisions.

Tentative determination of the water right

The tentative determination is provided on the front page of this report.

History of water use

The dairy was built in the early 1990's by Henry Oord and was sold to Sunnyside Dairy, LLC in 2012. Permit G4-30371P was obtained for the first dairy barn, and then in the early 2000's Permit G4-30398P was purchased and moved to the site to provide additional water rights. The second dairy barn was built in 2004-2005. The Board reviewed

information provided by the applicant's consultant, which included two memos of supporting information. According to this information, Proof of Appropriation was filed for permit G4-30371P on March 15, 2012 for full use. Quantities used were 156 af/yr for continuous dairy operation and 3 af/yr for continuous group domestic supply. Ecology staff performed a proof inspection of G4-30371P on April 24, 2013, verifying full use. Permit G4-30398P is a permit in good standing, extended for completion of construction through September 1, 2013. It has been partly used, though not to its full extent. The two wells supplying G4-30371P and G4-30398P are metered. The domestic use under the permits is made through a public water supply from the current wells that serves the dairy and related facilities.

Previous changes

Permit G4-30398P originally issued for a proposed dairy location east of Sunnyside. In 2001-2002 the entire permit was transferred to the current dairy site where it is being developed and a superseding permit was issued, dated February 13, 2002.

SEPA

The Board has reviewed the proposed project in its entirety. The requested changes involve less than 2250 gpm and are considered categorically exempt (WAC 197-11-800(4)). The Board has determined that SEPA compliance is satisfied.

Other

See Investigation Section describing proposed plans and specifications.

The information or conclusions in this section were authored and/or developed by Tim Reiersen.

COMMENT AND PROTESTS [See WAC 173-153-130(6)(b)]

Public notice of the application was given in the *Yakima Herald Republic* on December 28, 2012 and January 4, 2013. The protest period ended on or around February 3, 2013. There were no protests received during the 30 day protest period. In addition, no oral or written comments were received at an open public meeting of the Board or other means as designated by the Board.

Date: n/a.

This was recognized by the Board as a ☐ Protest ☐ Comment n/a.

Name/address of protestor/commenter: n/a.

Issue: n/a.

Board's analysis: n/a.

Other

n/a.

The information or conclusions in this section were authored and/or developed by Tim Reiersen.

INVESTIGATION [See WAC 173-153-130(6)(c)]

The following information was obtained from a site inspection conducted by Jeff Stevens and Dave Brown on March 12, 2013, technical reports, research of department records, and conversations with the applicant and/or other interested parties.

Proposed project plans and specifications

Proposal Summary. At the dairy site, use will continue as before but, assuming successful well construction, the flow rate will be provided free of sand.

Estimate of Beneficial Use. For G4-30398P the full face value of the water right permit is eligible for transfer because it is a groundwater permit in good standing, with no added purpose of use requested.

For G4-30371P the Board reviewed information provided by the applicant's consultant Tim Reiersen, which included a February 13, 2013 memorandum of supporting information ("technical memo"). According to this information, Proof of Appropriation was filed for permit G4-30371P on March 15, 2012 for full use. Quantities used were 156 af/yr for continuous dairy operation and 3 af/yr for continuous group domestic supply. The two wells supplying G4-30371P and G4-30398P are metered. The combined production from the wells has been: 209 acre-feet in 2007; 135 acre-feet in 2008; 156 acre-feet in 2009; 206 acre-feet in 2010; 157 acre-feet in 2011; and 125 acre-feet in 2012. This information shows that full use of G4-30371P has occurred for three out of the past five years, allowing for the range of uncertainty in the flow meter readings. The domestic use under the permits is made through a public water supply that serves the dairy and related facilities. The 3 af/yr allotment is reasonable for domestic use for this facility. The domestic water is not metered separately. On April 24, 2013 Ecology performed a proof inspection on G4-30371P which also verified full use.

The estimated transferable quantities for G4-30371P were given as: 300 gpm, 159 af/yr; additive to G4-30398P.

The estimated transferable quantities for G4-30398P were given as: 200 gpm, 158 af/yr; additive to G4-30371P.

Current and Transfer Aquifer. The applicant's consultant reviewed the hydrogeologic setting for the current and proposed source locations and described aquifer conditions in the technical memo provided to the Board. According to this information the current water source for both permits is the Saddle Mountains Basalt Formation aquifer (SMB), based on original permit requirements and actual well construction.

At the dairy, the requested added well sites will be located about 1/2 to 1 mile to the south of the current wells, and within property owned by Sunnyside Dairy, LLC. According to the technical memo the SMB aquifer is expected to improve in water production towards the south in the direction of the valley floor. The added wells have not yet been drilled. To qualify for approval under state law, they must be constructed to withdraw from the SMB aquifer.

By the depth of casing and sealing required, the current permits both require construction to isolate the lower part of the SMB aquifer. The reason for this is stated in the Report of Examination for G4-30371P:

At this particular location, aquifers above the Pomona Member of the Saddle Mountains Basalt Formation are considered to provide the same limitations to availability as the overlying sediment of the Ellensburg Formation. This is based on the possible inadequacy of the Elephant Mountain Member as a confining layer because of its thinness, and use of the zone for domestic purposes. Ground water above the Pomona Member will only support small uses such as for domestic and stock water uses. Large volume ground water withdrawals from this zone would exceed the safe sustaining yield of the aquifers.

The technical memo stated that at the proposed well sites this restriction to exclude the upper SMB does not necessarily apply. The opinion was offered that a casing and sealing provision modeled after the SMB construction requirement for the J & J Bosma Dairy permit, a neighboring SMB permit, would satisfy the "same body of public groundwater" statutory requirement for the water right changes (RCW 90.44.100). Superseding Permit G4-30236(A)P issued April 14, 2006 to J & J Bosma Dairy with the following provision:

The well drilled under this permit shall be restricted to the Saddle Mountain[s] Basalt Formation. The casing shall be set or placed (not driven) twenty feet into the first solid, unfractured, non-porous, non-vesicular basalt flow of the Saddle Mountain[s] Basalt Formation. The well annulus shall be pressure grouted utilizing cement grout as a sealing agent from the bottom of the casing to the land surface and the annulus shall be at least four inches greater in diameter than the permanent casing. The well shall be restricted to a depth corresponding to the top of the Priest Rapids Member.

Impairment Analysis. The added well sites cannot be approved if impairment to existing rights will result. The applicant's consultant prepared a technical memo addressing impairment. The impairment analysis examined the potential use from each well requested to be added, and estimated the effect of the change on the nearest neighboring wells owned by others.

Using standard methods, the applicant's consultant estimated that pumping effects on the nearest neighboring wells due to the changes to add well sites would be on the order of one to two feet of added water level lowering; compared to current permit conditions, and within the SMB aquifer. The pumping effects were predicted under the assumption that the wells were open to the same water bearing zones / same aquifer. At the dairy site, the impairment analysis assumed that all 317 af/yr of permitted SMB water (both permits combined) was being pumped from a single well, closest to the nearest neighboring well.

Dairy Site Area SMB Wells. The two existing and two proposed well sites for Sunnyside Dairy, and the nearest SMB wells in the area of Sunnyside Dairy, are identified in Table 1.

Table 1. Nearest SMB well information summary for impairment analysis at dairy site.

Well	Location	Water Right No.	Depth/Construction
Sunnyside Dairy Well 1	W1/2SW1/4 S35, T11N, R22E; 1300 ft S and 200 ft E from W1/4 corner S35.	G4-30371P G4-30398P	8 inch casing sealed to 415 feet; 760 feet deep. Draws from lower portion of SMB.
Sunnyside Dairy Well 2	W1/2SW1/4 S35, T11N, R22E; 100 ft N and 450 ft E from SW corner S35 (as-built description, replaces proposed location from permit).	G4-30371P G4-30398P	12 inch casing sealed to 456 feet; 825 feet deep. Draws from lower portion of SMB.
Sunnyside Dairy Proposed Site in Sec. 3	SE1/4NE1/4 S03, T10N, R22E; 150 ft N and 400 ft E from E1/4 corner S03.	Change Applications YAKI-12-03, 04	SMB, not yet constructed.
Sunnyside Dairy Proposed Site in Sec. 2	W1/2SW1/4 S02, T10N, R22E; 150 ft N and 300 ft E from SW corner S02.	Change Applications YAKI-12-03, 04	SMB, not yet constructed.
Skyridge Farms Well 1	SW1/4SE1/4 S35, T11N, R22E; 1133 ft E and 52 ft N from S1/4 corner S35.	G4-30163P G4-30310P	10 inch casing sealed to 455 feet; 783 feet deepened to 880 feet. Draws from lower portion of SMB.
Skyridge Farms Well 2	NW1/4SE1/4 S02, T10N, R22E; 725 ft E and 51 ft S from center S02.	G4-30163P G4-30310P	10 inch casing sealed to 518 feet; 830 feet deep. Draws from lower portion of SMB.
J&J Bosma Dairy Well	NW1/4NE1/4 S10, T10N, R22E; 400 ft S and 200 ft E from N1/4 corner S10 (location interpreted from aerial photo).	G4-30236(A)P G4-30356P	8 inch casing sealed to 400 feet; 475 feet deep. Draws from upper portion of SMB.

Among the neighboring wells in Table 1., the J & J Bosma Well was determined to be the closest to a proposed site, with a separation distance of 2600 feet from the Sunnyside Dairy proposed site in Section 3. The technical memo noted that the J & J Bosma Dairy well is not drilled into the lower portion of the SMB, but instead draws its water from the upper part of the SMB aquifer. This is consistent with the prediction from the technical memo, that the upper SMB aquifer would have better production potential at lower elevations.

Effect on Pending Change Applications and Instream Flows. The authorized amount of water withdrawn from the aquifer on an annual basis will not be increased due to the change. The proposal is within a confined basalt formation aquifer and will not involve any significant difference in effect with respect to surface waters such as the Yakima River, and therefore no impairment to surface water rights will occur due to the changes. There is no indication that approval of the change would cause any undue effect or conflict with any other pending applications for change.

Development Schedule. The applicant proposes a completion of construction phase to December 31, 2017 unless extended and proof of appropriation phase to December 31, 2018 unless extended. Well construction at this location can be very expensive and time is requested for financing the project and allowing time for construction of a second well if necessary.

Other water rights appurtenant to the property (if applicable)

In addition to the two permits requested for change, there are two state-issued water right documents located within the requested place of use for Sunnyside Dairy, for supply to the dairy. These two authorize use from a separate, shallower aquifer known as the Ellensburg Formation aquifer. All four state-issued documents total to: 990 gpm and 617 af/yr.

The Ellensburg Formation aquifer permits are:

Change Authorization No. CG4-CCV1-4P278; 240 gpm, 100 af/yr for continuous dairy operation, source: a 233 feet deep well (SW1/4SW1/4 Sec. 35, T11N, R22E). Located 1180 ft N & 120 ft E of SW cor. Sec. 35.

Change Authorization No. CS4-00135CTCL; 250 gpm, 204 af/yr for continuous dairy operation, source: same well as prior right and 300 feet deep well (SW1/4SW1/4 & NW1/4SW1/4 S35).

Located 1180 ft N & 120 ft E of SW cor. Sec. 35 and 1850 ft N & 250 ft E of SW cor. Sec. 35.

Sunnyside Dairy also owns a separate dairy / stock operation on the west side of Maple Grove Road (west of main dairy). This dairy receives water from its own separate well (SMB) under Certificate No. G4-29263C for 50 gpm, 11.8 af/yr continuous dairy operation; 1 af/yr continuous in-house domestic supply. This water right is not part of the land or water rights under consideration for the subject changes.

Current state law also authorizes water use for certain purposes and quantities within a statutory exemption from the permitting requirement. See Revised Code of Washington 90.44.050.

Public Interest (groundwater only)

The proposed transfer is subject to RCW 90.44.100 and therefore cannot be detrimental to the public interest, including impacts on any watershed planning activities. During its review, the Board did not encounter any evidence to suggest that approval of the requested changes would be detrimental to the public interest, including impacts on any watershed planning activities.

Tentative Determination

In order to make a water right change decision, the Board must make a tentative determination on the validity and extent of the right. The Board has made the tentative determination as displayed upon the first page of this report. There are several circumstances that can cause the Board's tentative determination to differ from the stated extent of the water right within water right documentation. Water right documents attempt to define a maximum limitation to a water right, rather than the actual extent to which a water right has been developed and maintained through historic beneficial use. Additionally, except for a sufficient cause pursuant to RCW 90.14.140, water rights, in whole or in part, not put to a beneficial use for five consecutive years since 1967 may be subject to relinquishment under Chapter 90.14.130 through 90.14.180 RCW. Water rights may additionally be lost through abandonment. The Board's tentative determination was based upon the following findings:

For G4-30371P, Proof of Appropriation was filed and full beneficial use was demonstrated.

For G4-30398P, the full face value of the water right permit is eligible for transfer, because it is a groundwater permit in good standing with no added purpose of use requested.

In summary, the quantities tentatively determined to be valid are:

For G4-30371P: 300 gpm, 159 af/yr; additive to G4-30398P; and for G4-30398P: 200 gpm, 158 af/yr; additive to G4-30371P.

Geologic, Hydrogeologic, or other scientific investigations (if applicable)

Two memos from the applicant's consultant provided supplemental information for the applications (Reierson, 2/13/2013 technical memo and 5/23/2013 ACQ memo). The technical memo provided an evaluation of the quantities eligible for transfer, the estimated annual consumptive quantity under G4-30371P, the relationship between the current and proposed sources, and the potential for impairment to existing rights due to the changes/transfers. The technical memo also identified the existing rights on the property and made references to other studies. The ACQ memo provided additional analysis of the annual consumptive quantity for YAKI-12-03 (change of G4-30371P).

Other

Dairy Operation Purpose. The purpose of use for dairy operation currently states it is for 2000 animals. This is a dairy operation served by multiple water rights and the applicant inquired whether the use could be measured by volume only because of the practical difficulties in relating use to number of animals. No increase in the volume of water is requested. The original Report of Examination for G4-30398P used the 2000 animal basis to calculate the annual volume for the dairy purpose. Ecology provided technical assistance to the Board that it will use the annual volume limitation for the dairy purpose so it is not necessary to state the number "2000 animals" as a stipulation in the purpose of use.

The information or conclusions in this section were authored and/or developed by Tim Reierson.

CONCLUSIONS [See WAC 173-153-130(6)(d)]

Tentative determination (validity and extent of the right)

The Board has tentatively determined that a valid transferable right exists in the following quantities:

For G4-30371P: 300 gpm, 159 af/yr; additive to G4-30398P; and for G4-30398P: 200 gpm, 158 af/yr; additive to G4-30371P.

Relinquishment or abandonment concerns

n/a.

Hydraulic analysis

The technical memo (Reierson, 2/13/2013) found that existing rights from the SMB aquifer will not be impaired due to the requested transfers, as discussed in the Investigation section of this report. Also, that the added wells will draw from the same body of public groundwater as the original wells.

Consideration of comments and protests

None.

Impairment

The requested change/transfers will not impair existing rights, including surface water rights.

Public Interest

The proposed change/transfers will not be detrimental to the public interest.

Other

The Board also considered the previous provisions associated with the water right as identified in the Background section of this report when making its decision.

The standard metering requirement provisions have been updated and are recommended to replace the original metering provisions.

The information or conclusions in this section were authored and/or developed by Tim Reiersen.

DECISION [See WAC 173-153-130(6)(e)]

The Board's decision is to conditionally recommend approval of the requested change/transfer proposal, in full description as follows:

1. The recommended quantification of valid water rights is:

MAXIMUM GAL/MINUTE 200	MAXIMUM ACRE- FT/YR 158	TYPE OF USE, PERIOD OF USE 157 ac-ft/yr for continuous dairy operation for 2000 animals; and 1 ac-ft/yr for continuous group domestic supply to a single home and dairy facilities.
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2. The recommended quantification of the right as changed is:

MAXIMUM GAL/MINUTE 200	MAXIMUM ACRE- FT/YR 158	TYPE OF USE, PERIOD OF USE 157 ac-ft/yr for continuous dairy operation; and 1 ac-ft/yr for continuous group domestic supply to a single home and dairy facilities.
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3. The source locations as changed are:

SOURCE				TRIBUTARY OF (IF SURFACE WATER)			
Four (4) wells							
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
22100221401	W1/2	SW1/4	35	11 N	22 EWM	37	Yakima
various	W1/2	SW1/4	02	10 N	22 EWM	37	Yakima
22100314401,402	SE	NE	03	10 N	22 EWM	37	Yakima

4. The place of use as changed is:

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED
NW1/4 Section 2, T. 10 N., R. 22 E.W.M.
AND Within Section 35, T. 11 N., R. 22 E.W.M.:
That portion of SW1/4 lying southerly of southerly Roza Canal right-of-way.
AND All that part of the S½SE¼ of Section 35, lying South of the South right-of-way line of Roza Canal and west of a line described as: Beginning at the Southwest corner of the SW¼SE¼ of said Section 35; thence North 01°30' West along the West line of said SW¼SE¼ a distance of 21.32 feet; thence North 22°41' East to the Southerly right-of-way line of the Roza Canal.
Except county road right of ways.
Yakima County Parcel No. 22100221401.

5. In conditionally approving the subject applications, the Board must by statute advise the applicant that they are not permitted to proceed to effect the proposed changes until a final decision is made by the director of the Department of Ecology.

The information or conclusions in this section were authored and/or developed by Tim Reiersen.

PROVISIONS [See WAC 173-153-130(6)(f)]

Conditions and Limitations

1. Before beginning construction, the drilling contractor must consult with the department concerning a cuttings sampling program.
2. The casing shall be set or placed (not driven) twenty (20) feet into the first solid, unfractured, nonporous, nonvesicular basalt flow occurring at or below 400 feet, whichever is greater. The well annulus shall be pressure grouted utilizing cement grout as a sealing agent from the bottom of the casing to land surface and the annulus shall be at least four (4) inches greater in diameter than the permanent casing. The well shall be restricted to a depth corresponding to the top of the Priest Rapids Member, which should be encountered at a depth of approximately 800 feet.
3. For new well construction at the dairy site, at the permittee's option the well may be constructed to withdraw from the Saddle Mountains Basalt Formation shallower than 400 feet below ground. The well(s) drilled under this construction option shall continue to be restricted to the Saddle Mountains Basalt Formation as follows: The casing shall be set or placed (not driven) twenty feet into the first solid, unfractured, non-porous, non-vesicular basalt flow of the Saddle Mountains Basalt Formation. The well annulus shall be pressure grouted utilizing cement grout as a sealing agent from the bottom of the casing to the land surface and the annulus shall be at least four inches greater in diameter than the permanent casing. If an alternative seal installation is made it must meet state minimum well construction standards and be preapproved in writing by Ecology. The well shall be restricted to a depth corresponding to the top of the Priest Rapids Member.
4. All other requirements specified by WAC 173-160 shall apply to these wells.
5. After completion of construction, each new well shall be video scanned (providing a visually clear and recognizable picture that is continuous from land surface to the terminus of the well) and the video tape reviewed by the Central Regional Office of the Washington State Department of Ecology prior to the installation of the production pump.
6. For the purpose of making water level measurements, installation and maintenance of an access port as described in Ground Water Bulletin No. 1 is required for each well. Installation and maintenance of an air line and gage is also required. The air line shall be constructed of 1/4 inch minimum diameter galvanized steel pipe, or comparable material if preapproved by the department. Distance from land surface to the bottom end of the air line shall be clearly posted at each well site, accurate at all times to 0.5 feet or less. The air line, access port, and all well equipment shall be installed and maintained to provide free access for accurate measurement of water levels at all times by both methods of measurement.
- 7.a. An approved measuring device shall be installed and maintained for the source(s) identified herein in accordance with the rule "Requirements for Measuring and Reporting Water Use", Chapter 173-173 WAC. Water use data shall be recorded weekly and shall be submitted annually to Ecology by January 31st of each calendar year typically.
- 7.b. The rule above describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed or available from Ecology as a document entitled "Water Measurement Device Installation and Operation Requirements".
- 7.c. At a minimum, the following information shall be included with each submittal of water use data: owner, contact name if different, mailing address, daytime phone number, WRIA, Permit or Certificate No., source name, annual quantity used including units, maximum rate of diversion including units, period of use, monthly meter readings including units, and peak flow including units for each month. In the future, Ecology may require additional parameters to be reported or more frequent reporting.
- 7.d. Ecology prefers web based data entry, but does accept hard copies. Ecology will provide forms and electronic data entry information.

7.e. Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above conditions, and to inspect at reasonable times any measuring device used to meet the above conditions, but only to the extent otherwise allowed by law.

8. A proof inspection will be conducted prior to final certificate issuance. The certificate will issue only for the actual quantity being withdrawn and the actual development completed.

9. Project construction and operation procedures shall ensure protection of wetlands, in accordance with Executive Order 90-04 Protection of Wetlands.

Mitigation (if applicable)

No mitigation requirements apply.

Construction Schedule

Construction has begun. Completion of Construction (pumps and mainline installed and equipped with capability to deliver the permitted water) shall occur by December 31, 2017, unless extended by Ecology. Beneficial use of water within the parameters of this change shall occur by December 31, 2018, unless extended by Ecology.

The information or conclusions in this section were authored and/or developed by Tim Reiersen.

The undersigned Board commissioner certifies that he understands the Board is responsible "to ensure that all relevant issues identified during its evaluation of the application, or which are raised by any commenting party during the Board's evaluation process, are thoroughly evaluated and discussed in the Board's deliberations. These discussions must be fully documented in the report of examination." [WAC 173-153-130(5)] The undersigned therefore, certifies that he, having reviewed the report of examination, knows and understands the content of this report and concurs with the report's conclusions.

Signed at Yakima, Washington

This 10 th day of July, 2013.



Jeff Stevens, Board Chairman
Yakima County Water Conservancy Board

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